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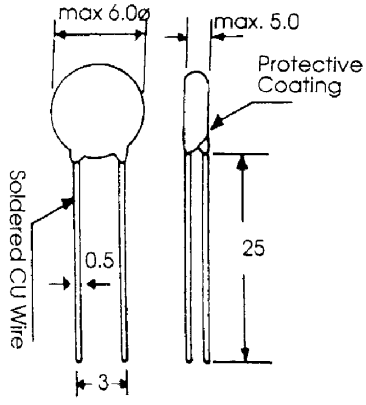
# NTC THERMISTOR

| Model No. | Resistance at 25°C(Ω) | B Contant 25/50°C (K) | Resistance Temp. Coeff 25°C(%/°C) |
|---|---|---|---|
| NTC-700 | 70 | 3,100 | -3.5 |
| NTC-900 | 90 | 3,100 | -3.5 |
| NTC-101 | 100 | 3,100 | -3.5 |
| NTC-121 | 120 | 3,100 | -3.5 |
| NTC-151 | 150 | 3,100 | -3.5 |
| NTC-201 | 200 | 3,100 | -3.5 |
| NTC-221 | 220 | 3,100 | -3.5 |
| NTC-251 | 250 | 3,100 | -3.5 |
| NTC-271 | 270 | 3,100 | -3.5 |
| NTC-301 | 300 | 3,100 | -3.5 |
| NTC-401 | 400 | 3,100 | -3.5 |
| NTC-501 | 500 | 3,100 | -3.5 |
| NTC-681 | 680 | 3,500 | -3.9 |
| NTC-102 | 1,000 | 3,800 | -4.3 |
| NTC-152 | 1,500 | 3,800 | -4.3 |
| NTC-202 | 2,000 | 3,800 | -4.3 |
| NTC-252 | 2,500 | 3,900 | -4.4 |
| NTC-302 | 3,000 | 3,900 | -4.4 |
| NTC-402 | 4,000 | 3,900 | -4.4 |
| NTC-502 | 5,000 | 3,900 | -4.4 |
| NTC-682 | 6,800 | 3,900 | -4.4 |
| NTC-103 | 10,000 | 4,100 | -4.6 |
| NTC-153 | 15,000 | 4,100 | -4.6 |
| NTC-203 | 20,000 | 4,200 | -4.7 |
| NTC-303 | 30,000 | 4,200 | -4.7 |
| NTC-503 | 50,000 | 4,200 | -4.7 |
| NTC-683 | 68,000 | 4,400 | -4.9 |
| NTC-104 | 100,000 | 4,400 | -4.9 |
| NTC-154 | 150,000 | 4,400 | -4.9 |
| NTC-204 | 200,000 | 4,500 | -5.1 |
| NTC-304 | 300,000 | 4,500 | -5.1 |
| NTC-504 | 500,000 | 4,600 | -5.2 |

## FOR TEMPERATURE COMPENSATION
## 5..ø NTC SERIES




* Resistance Value allowable difference.

| J | K | L | M |
|---|---|---|---|
| ±5% | ±10% | ±15% | ±20% |

. B-Constant deviation : ±10%(Calculated by R25 & R50)
. Thermal dissipation factor : 6.5mw/C
. Thermal time constant : 20 sec.
. Operating temp. range : - 30° ~ + 130°C
. Max. Allowable power (25°C): 0.55W

**Jameco Part Number 206990**

## PHYSICAL PROPERTIES

### ■ RESISTANCE - TEMPERATURE CHARACTERISTICS

of the termistors is the relation between resistance & temperature, the expression as follows:

(1) $R1=R2 \cdot \exp B(1/T1 - 1/T2)$

WHERE : R1 is the resistance value at absolute temperature T1
R2 is the resistance value at absolute temperature T2
B is a constant depending on each thermistor

(2) According to the above formula, B can be expressed by:
$B=Ln(R1/R2)/(1/T1 - 1/T2)$

### ■ TEMPERATURE COEFFICIENT OF RESISTANCE

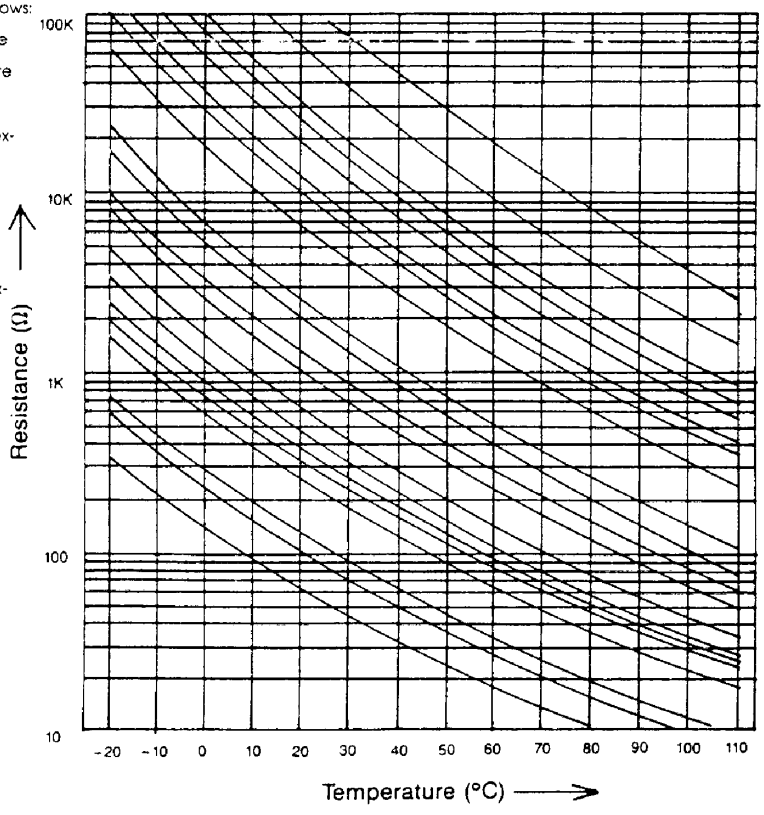
(α) originates from the above formula (1), the expression as follows:
$\alpha = - B/T_2$

### ■ DISSIPATION CONSTANT

(δ) is defined for power in milliwatts necessary for rasising temperature of the thermistor by 1°C, as follows:
$\delta = P/\Delta t$ (mW/°C)
(P : POWER Δt: rasie temperature)

### ■ TIME CONSTANT (T.C.)

is regard as the time required for a thermistor to change 63% of the difference between its initial and final temperature.




NTC SENSOR Thermistors Assembly

HOW TO ORDER

NTC- [ ] A
Model No. Assembly